The Promise of Data-Driven Healthcare

MegaTrends for 2018 and Beyond

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Presenters

Valerie Barton, Managing Director
Valerie oversees Manatt’s data and analytics capability. She works with clients to develop strategies for optimizing and sharing their data assets and recruiting and managing staff with specialized technical expertise. With more than 20 years in the field, she draws upon both her private- and public-sector backgrounds when advising clients. Valerie serves on the Boards of Directors of the Primary Care Coalition and The Foundation Schools.

Laura Braslow, Director
Laura specializes in data management and acquisition, research design and analysis for public policy applications. She has provided research and data support for Manatt clients for over ten years, working with hospitals, health plans, state and local governments, foundations, and advocacy organizations to design and implement their data strategies to support reforms and system transformation.

Kevin Casey McAvey, Senior Manager
Leveraging expertise in economics and quantitative methods, Kevin specializes in the development of data-driven healthcare strategies and solutions for payers, providers, and state and federal government agencies. Kevin serves on the Boards of the National Association of Health Data Organizations and the Association of Public Data Users.
Today’s Objectives

To discuss the trends in data and analytics affecting healthcare decision-makers in the coming years

To engage in Q&A with Manatt Health team
Life is nothing without a little chaos to make it interesting.

Amelia Atwater-Rhodes
Three Big Challenges

Data sources not yet adequate for answering new questions

Development of tools for making data impactful have lagged IT infrastructure development

Lots of technology innovation but highest value innovations difficult to discern and integrate into workflows
**TREND 1: Stakeholders search for meaningful information in a data-abundant world**

With more data than ever available for use, organizations must become more sophisticated data consumers, assessing the usefulness of data to inform program and policy goals.

**Projected Healthcare Data Growth**

- **2013**: 153 Exobytes
- **2020**: 2,314 Exobytes

Annual growth: +48%

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**Need for Data/Analytic Strategies**

- Robust data analytics capacity: “nice to have” or “need to have”? What are the highest value investments? How do we know what we don’t know?
- Organizational strategy and context key

**Commercial Vendor Roles Expanding**

- Commercial vendors continue to expand capabilities, methods, and reporting tools
- Cost limits access for some sectors (public, safety nets) but may decrease with time

**Public Agencies Calibrating Roles**

- Public entities allocating resources toward higher-value activities where it is uniquely positioned to fill a public need

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**TREND 2:** New analytic capacity revealing healthcare cost trends

Data and analytics are allowing stakeholders to understand their cost drivers and develop strategies to address them.

**PAYERS + PROVIDERS**
- Manage population & service spending
- Strengthen referral patterns & networks
- Test new payment methods
- Control administrative spending
- Streamline claims processing
- Pre-adjudication fraud analysis

**EMPLOYERS**
- Monitor member health
- Promote healthier living
- Negotiate direct services

**CONSUMERS**
- Assess plan options
- Engage in service shopping

**GOVERNMENT**
- Promote price transparency
- Release cost reporting
- Evaluate program spending (see “Payers”)
**TREND 3:** Consumers generating and using health data, but clinical connections remain limited

Consumers, particularly younger generations at home in the Internet of Things (IoT), are increasingly comfortable with using devices to monitor their wellbeing. Whether this data will be clinically useful remains an open question.

### Consumers engaging with new tools and applications

- Payers and states creating transparency tools to steer patients towards value, though patient adoption has been slow
- Providers creating patient portals to support patient engagement
- Proliferation of tech apps and devices, including digital health assistants, self-monitoring tools, and health/wellness coaching

### More health-related data being generated than ever

- Increased patient comfort with health data tracking and sharing
- Global wearable shipments: 100m+
- U.S. health application downloads: 200m+

### New tools not well connected to clinical practice (yet)

- Limited clinical impact to date; providers and entrepreneurs need to identify and target high value use cases and adoption pathways
- More behavioral research required to develop clinically meaningful user interfaces and signaling to drive consumer action
TREND 4: Population health intriguing paradigm, but data development slow

Data, methods, and infrastructure development to support population health has lagged. Addressing these deficits is a critical factor for broader adoption of these models.

Multiple Stakeholders Have Interest in Population Health

- Plans and providers are interested in understanding and managing the populations for which they are at risk to improve quality and reduce costs
- CMS and states have shown interest in population health, both as payers and from a public policy perspective

PHM Infrastructure Complex and Costly to Implement

- In addition to workforce and implementation challenges, the data and analytics infrastructure to support effective PHM can be costly and complex to implement.
- Investment in PHM infrastructure requires identification of high-value use cases targeted to business or policy goals

Stronger Population Health Analytics and IT Platforms

- Technology vendors working to integrate more data sources and to disseminate meaningful information to care managers and providers through more effective dashboards and reporting platforms
**TREND 5:** Sharing data not yet widely accepted as good policy or business

Data sharing carries business risk, and efforts to pool data are hindered by legal and regulatory frameworks that limit such efforts.

### Data as a Competitive Asset
- Incentives have not existed to encourage data sharing
- Data viewed as a private asset, key to market advantage
- Benefits of sharing must outweigh risks of exclusion

### Federal + State Laws
- State laws and regulations on “sensitive” data vary widely
- Stakeholders cautious
TREND 6: Analytic methods proliferate, AI emerging as new frontier

With increased computing power, data access, and methodological innovation, healthcare stakeholders are testing new data science methodologies and other advanced techniques to derive actionable information.

1. Methodological innovation will continue, as stakeholders seek to predict, diagnose, target, and provide more effective and efficient care and services
   - Market will increasingly test and focus on high value use cases as evidence develops

2. “AI” methods are newly emerging, early evidence is promising but these methods face significant challenges to broad-based implementation
   - Data quality issues and technical infrastructure needs may be limiting factors

3. Local data strategies will be required for healthcare industry stakeholders to effectively integrate available data and make analytic investments
   - Analytics is never one size fits all, and to show real value, stakeholder resources must be closely targeted business, strategic, or policy goals
TREND 7: Data and analytics enable clinical transformation on the front lines of both care delivery and research

Providers and life sciences seek to apply new data, methods, and infrastructure tools to transform the practice of medicine, improve quality and outcomes, more effectively manage the progression of disease, and reduce the risk of preventable adverse events.

1. Delivery systems continue to identify opportunities to leverage investments in HIT, private and public health information exchange capabilities and integrate with clinical and care team workflows
   - For many delivery systems, significant areas of improvement remain in effective implementation and broad-based adoption and use of existing capabilities.

2. New platforms integrate data and predictive analytics with clinical protocols to provide increasingly sophisticated clinical decision support
   - Growing focus on dashboard, reporting, and messaging-based tools which provide actionable information and reduce provider and administrative burden.

3. Precision medicine represents a newly emerging area which has shown significant promise to date, particularly in defined disease states
   - Life science, providers and clinical researchers increasingly leveraging new genomic, biomarker, and molecular data in diagnosis and treatment.
**TREND 8:** Providers and payers increasingly using and sharing data to manage performance and demonstrate value

Stakeholders engaged in payment and delivery system transformation are seeking expanded opportunities to use data to improve targeted clinical and quality outcomes, and bring value in support of payment and delivery transformation goals.

**Providers**
- Many leading health systems are invested in building data and analytic capabilities to monitor and manage performance, reduce adverse events and re-admissions, and drive quality outcomes.
- The future trajectory and pace of value-based transformation currently unclear, which could slow broad provider adoption of data-driven performance management and improvement activities.

**Public Sector**
- CMS has historically been a significant mover, implementing a range of APMs and both sharing and using data to help move providers to increase focus on quality and performance management goals.
- Some states, particularly those pursuing Medicaid innovation and other waivers, need to measure and report performance data to support delivery system performance improvement activities.

**Private Payers & Life Science**
- Private payers continue to innovate, utilizing claims and other data to target high risk patients and engage in performance management with their care managers and in-network providers.
- Some life sciences companies are beginning to explore value-based contracting with payers.
**TREND 9:** Key data gaps and limitations inhibit payment and delivery system strategic planning

New, shared sources of data about providers, patients, and coverage are needed to support a common understanding of the current structure and future direction of the payment and delivery system in a multi-payer and multi-system environment.

**Defining Payer and Delivery System Universe and Structures**

- States, payers, and delivery systems struggle to comprehensively characterize basic structures of the existing payment and delivery system in their markets.
- Significant data gaps exist with regard to the universe of providers and relationships between systems, clinicians, and locations of service, as well as payers and enrollment.

**The Need for Shared Infrastructure and Common Definitions**

- All stakeholders in a given market would benefit from shared capabilities to manage and link provider, payer and patient information, with reduced administrative burden.
- As markets evolve and innovative payment and delivery models proliferate, existing data sources become less capable of meeting planning and program management needs.

**Public Sector Most Likely to Develop Shared “Source of Truth”**

- State agencies have the opportunity to leverage, develop and/or support shared capabilities and systems which can serve as a “source of truth” across payers and providers.
- Some private sector organizations and data vendors have sought to enter this space in limited ways, but are unlikely to meet the need for a shared “source of truth”.

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### Trends for 2018 and Beyond

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